place where your specimen has been captured. One ought to let them live, to see if they will multiply. It is a useful insect, destroying the bed plant-insects and not at all noxious to vegetation.

"The same sort of transport was effected from North Australia to the hot-houses of Kew, England. The *Cylindrodes*, sort of *Gryllotalpa*, was found in those hot-houses making great ravages in the large herbaceous plants in which it makes canals and holes.

"I received also from Java our Gryllotalpa vulgaris, certainly

transported to Java in the earth of some pots of plants.

"In the Hymenoptera those transports are frequent only by the ships, e. g., in 1854 our large Vespa crabro was caught for the first time in North America, and now several of our wasps have invaded the United States; they were not known at the time of Say who first gave a good account of the United States Hymenoptera.

"I shall have your photographs placed in our museum with a

notice explaining what they are.

"If you occupy yourself with Orthoptera I should be indebted to you if you could send me a numerous set of the small Gryllidæ called *Tridactylus* or *Xya*, of which I could not well make out the American species."

Dr. H. de Saussure.

A NEW SCALE-INSECT OF THE GENUS LECANIUM.

By T. D. A. COCKERELL, Mesilla, N. Mex.

Lecanium magnoliarum n. sp. ♀.—Scale, 8 mm. long, 4½ wide, 2½ high, elongate-oval, dark brown, the subdorsal area irregularly marked with black or blackish; dorsum bluntly keeled; surface granular, little shiny, with low wart-like protuberances at intervals, reminding one of the skin of certain slugs of the genus *Veronicella*; marginal area obscurely radiate by darker lines, but not plicate. Removed from the twig the scale leaves a white oval mark, the secretion abundant in the middle, and forming a very distinct outline where the margin of the scale was, but not indicating the place of the stigmatal incisions; ♀ antennæ 8-jointed, long and slender. Formula 3 (451) (28) 67; 4 about ¾ length of 3, 2 hardly over half as long as 3, 6 very much shorter than 5, 2 with a pair of long bristles near the end, 5 with a long bristle not far from the end, 8 with several bristles; another example has 4 not over ²⅓ length of 3, 8 short, decidedly shorter than 2, 5 not quite so long as 4; formula 3 (41) 52 (86) 7. Legs long and unusually slender, coxæ and trochanter each with a bristle

near the end, coxæ a little longer than trochanter; tibia at least as long as femur, tarsus about three-fifths length of tibia; claw small; tarsal digitules short, not extending as far as those of claw; claw digitules filiform, but with tolerably large knobs. Dermis chitinous, with scattered round gland-spots, which are most numerous and largest near the margin; anal plates of the same color as the dermis, not darkened; marginal spines small and entire; a short distance from the margin are numerous small tubular glands; newly hatched larva very pale yellowish, with a slightly translucent dorsal line, appearing dark when the insect is on a dark ground; no true markings.

Hab.—Numerous on bark of twigs of deciduous magnolia in Japanese nursery at San José, Cal., June 12, 1897 (E. M. Ehrhorn). Presumably introduced from Japan. It is a species of Eulecanium; from armeniacum it differs in the young as well as the adult; the scale is something like berberidis, but the antennæ, and especially the legs, are quite different; it is also rather like genistæ, but differs in the antennæ. The species has been alluded to in "California Fruit Grower," July 3, 1897, p. 5.

COLLECTING IN THE TIERRA CALIENTE.

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By O. W. BARRETT.

All Mexico is divided into two parts: open barren upland, hot and damp lowland. An imaginary line may be drawn along the Atlantic slope of Central America from north to south and 500 feet above that line is temperate, while 500 feet below is tropical climate. The mesa is not a desert, neither is the tierra caliente a jungle in toto, but they are vastly different regions.

The aspect is more varied in the low country—reedy, swampy areas alterating with primeval forest and chaparral wastes. From May to October the rivers rise and transform the broad grassy plains along their banks into shallow lakes; and the forests become dark, steaming hot-houses. During the Winter months, or dry season, a part of the flora dries up and Nature rests as much as she can.

Can the collector work during the rainy season? By spreading his specimens in the sun every day or two and wrapping the boxes in oil-cloth at night with plenty of naphthaline he can save a good per cent. of the collected material; yet mildew and the accursed ants will get in somehow. Where storage is such a